Abstract of the Disclosure

In some embodiments, the invention includes a method of processing a video stream. The method involves detecting a request to playback a particular frame. It is determined whether a decoded version of the particular frame is in a decoded frame cache. If it is not, the method includes(i) determining a frame dependency for the particular frame; (ii) determining which of the frames in the frame dependency are in the decoded frame cache; (iii) decoding any frame in the frame dependency that is not in the decoded frame cache and placing it in the decoded frame cache; and (iv) using at least some of the decoded frames in the frame dependency to decode the particular frame to create a decoded version of the particular frame. In some embodiments, the request to playback a particular frame is part of a request to perform frame-by-frame backward playback and the method is performed for successively earlier frames with respect to the particular frame as part of the frame-by-frame backward playback. In some embodiments, the part (i) is performed whether or not it is determined that a decoded version of a particular frame is in the decoded frame cache without part (iv) being performed. Other embodiments are described and claimed.

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